thanks

Rosemarie

On Jul 18, 2013, at 7:29 AM, "Bollweg, George" <bollweg.george@epa.gov> wrote:

FYI per Phillippa's request, sorry if a repeat. I haven't yet read it...

From: Cannon, Phillippa
Sent: Thursday, July 18, 2013 9:01 AM
To: Lobdell, Danelle; Drumm, Heather; Bollweg, George
Subject: Fw: Marietta Times: Possible negative neurological link from manganese

It looks like the reporter went ahead with her story using the fact sheet. Can you forward to Dr. Bowler? I'm forwarding from a Blackberry and don't have her email address saved on the device.

From: Speizman, Elissa
Sent: Thursday, July 18, 2013 8:36:58 AM
To: Hedman, Susan; Mathur, Bharat; Czerniak, George
Cc: Rowan, Anne; Cannon, Phillippa
Subject: Marietta Times: Possible negative neurological link from manganese

The Marietta Times

Possible negative neurological link from manganese

Recent results online

July 18, 2013
By Jasmine Rogers (jrogers@mariettatimes.com) , The Marietta Times

Airborne manganese may be correlated to some negative neuropsychological health effects, including decreased motor functions and hand tremors, according to recently-released results of an ongoing study in Ohio.

The possible link was downplayed in Marietta more than three years ago when researchers led by Dr. Rosemarie Bowler of San Fransisco State University presented the results of their 2009 study, measuring manganese exposure and neurological functioning of adult Marietta residents.

The study was expanded to East Liverpool in late 2011 and data released from that study last week showed a more definitive link, noted Dick Wittberg, Washington County Health Commissioner and Director of the Mid-Ohio Valley Health Department.

"When they got through with us and they presented, they were not willing to say any adults suffered any health consequences. And now they are saying that," said Wittberg, looking over results posted on the Environmental Protection Agency's website.

In Marietta, the airborne metal material is produced and released into the air through Eramet Marietta's smelting process. In East Liverpool, residents are exposed to manganese through raw products storage and packaging facility S.H. Bell, according to the report.

Eramet has made significant strides to reduce manganese emissions over the past several years, said Joy Frank-Collins, a spokeswoman for Eramet Marietta.

Fact Box

Manganese and health effects

- Increased exposure to airborne manganese may be related to neuropsychological health effects.

- Adult residents in manganese-exposed Marietta and East Liverpool were studied, tested and compared to residents in Mount Vernon where there is no airborne manganese source.

- The recent results of the East Liverpool study show that residents there have slightly higher concentrations of manganese in their blood and perform worse than the two comparison cities in a handful of neuropsychological tests.

- The possible effects of manganese exposure on children ages 7 to 9 were recently studied in Marietta and are currently being analyzed.

- A study of manganese-exposed children in the same age group is planned for East Liverpool in the near future.

Source: Dr. Erin Haynes and www.epa.gov/nheerl/mnstudy

"To date we've done about $40 million worth of investments in the facility that have continued to decrease the alloy emissions and increase sustainability of the plant," she said.

Among other things, the plant installed an emissions abatement system that has dramatically decreased emissions since the local manganese study, and they are continually looking at ways to improve, she said.

S. H. Bell has also consistently lowered manganese emissions over the past several years, according to the report.

While manganese levels in the blood were within normal ranges in all three towns, the levels were higher in the manganese-exposed cities and highest in East Liverpool residents, noted University of Cincinnati environmental health researcher Dr. Erin Haynes.

Haynes was not a part of the study, but has been conducting a similar study of manganese effects in children ages 7 to 9 in Marietta and will soon be expanding the study to East Liverpool.

"We wanted total life exposure-children who have lived in the cities their entire lives and in utero," she said.

The results of the Marietta testing are still being analyzed, said Haynes, but there is already a hope that she will able to secure more grant money to revisit the same test subjects later in adolescents, she said.

In the adults study, testing results in both cities and in a city with no airborne manganese source were compared.

The study found that East Liverpool residents scored worse on a number of neurological functioning tests than in Marietta or comparison city Mount Vernon, said Wittberg.

East Liverpool scored worse than both cities on word reading, motor speed, motor strength and motor tactile tests, according to study results.

East Liverpool residents also had greater instances of postural sway and hand tremors, said Wittberg.

"These are the same types of thing associated with lead and mercury exposures and we know the effects those things have on infants and children and my suspicion is that we're going to be ending up with the same conclusion with manganese," he said.

Wittberg is worried that even though exposure rates have been reduced, the manganese could have a negative health impact on children, whose still-developing brains are more susceptible to neurological problems.

"My concern has always been what does it do to the children. Because these things they are talking about are already having a neurological effect on adults and their brain is already formed," he said.

Data from the adult study will continue to be analyzed. Current analysis is available on the EPA's website at www.epa.gov/nheerl/mnstudy/.

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